**ASSOCIATED TRANSPORTATION ENGINEERS**
100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110 • (805) 687-4418 • FAX (805) 682-8509
Since 1978

Richard L. Pool, P.E.
Scott A. Schell, AICP, PTP

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Ms. Julie Guajardo McGeever
Hochhauser Blatter Architects and Planning
122 East Arrellaga Street
Santa Barbara, CA 93101

***TRAFFIC AND PARKING ASSESSMENT FOR THE KINGSTON BAY SENIOR LIVING PROJECT - CAMBRIA, CALIFORNIA***

Associated Transportation Engineers (ATE) has prepared the following traffic and parking assessment for the Kingston Bay Senior Living Project, located at 1981 Green Street in the community of Cambria. It is understood that the traffic study will be submitted to San Luis Obispo County for environmental review.

## PROJECT DESCRIPTION

The project is proposing to construct a 31-unit assisted living/memory care facility with 41 beds on a 1.26-acre vacant parcel located at 1981 Green Street west of State Route 1 in Cambria. Access to the site is proposed via one driveway on Green Street and one driveway on Ardath Drive. Figure 1 (attached) illustrates the project site plan.

## PROJECT TRIP GENERATION

Trip generation forecasts were developed for the project based on rates published in the Institute of Transportation Engineers (ITE), Trip Generation, 8th Edition[1] for Assisted Living uses (Land Use Code #254). Table 1 presents the trip generation forecasts for the project.

[1] Trip Generation, Institute of Transportation Engineers, 8th Edition, 2010.

**Table 1**
**Project Trip Generation**

| Land Use | Size | Average Daily | | A.M. Peak Hour | | P.M. Peak Hour | |
|---|---|---|---|---|---|---|---|
| | | Rate | Trips | Rate | Trips | Rate | Trips |
| *Proposed Use:* | | | | | | | |
| - Memory Care Facility | 27 Beds | 2.74 | 74 | 0.17 | 5 | 0.29 | 8 |
| - Assisted Living | 14 Beds | 2.74 | 38 | 0.17 | 2 | 0.29 | 4 |
| **Total Trips:** | | | **112** | | **7** | | **12** |

The data presented in Table 1 show that the project is forecast to generate 112 average daily trips, 7 A.M. peak hour trips, and 12 P.M. peak hour trips. Project trips were distributed and assigned to the adjacent study-area roadways and intersections as illustrated on Figue2

## POTENTIAL TRAFFIC IMPACTS

According to Caltrans criteria[2], projects that generate less than 50 peak hour trips generally do not have the potential to generate significant impacts unless the affected state highway facility operates in the LOS E- F range. As shown in Table 1, the project is forecast to generate 112 ADT, with 7 trips occurring during the A.M. peak hour and 12 trips during the P.M. peak hour based on ITE rates.

The addition of project traffic to the study-area roadways and intersections (see Figure 2) would not significantly impact the local Cambria street network. The addition of project traffic to the State Route 1/Ardath Drive, Ardath Drive/Green Street and Ardath/Londonderry Lane intersections would not result in significant impacts. The addition of 1 A.M. trip and 3 P.M. trips would not warrant a left-turn lane on the eastbound approach of Ardath Drive at State Route 1. The addition of 1 A.M. trip and 1 P.M. trip to northbound State Route 1 would not significantly impact the left-turn movement at the signalized intersection.

## SITE ACCESS

Vehicular access to the site is proposed via one driveway on Green Street and one driveway on Ardath Drive. Green Street and Ardath Drive are 2-lane local streets that primarily serve residential uses. Figure 1 illustrates the driveway connections. As shown, the driveways are 20 feet wide. The driveway width is sufficient to accommodate the low volume of traffic forecast for the driveways (5 inbound/2 outbound trips during the A.M. peak hour and 6 inbound/6 outbound trips during the P.M. peak hour).

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[2] Guide For The Preparation of Traffic Impact Studies, Caltrans, December 2002.

Given the proximity of the proposed driveways to the Ardath Drive/Green Street intersection, adequate sight distances must be provided at the two project driveway connections. Field measurements of the sight distance were taken at the two project driveway locations. The sight distance measurements are provided in Table 2 as well as the sight distance requirements from the County's design standards.

**Table 2**
**Sight Distance Measurements**

| Project Driveway | Driveway Distance to Adjacent Intersection | Sight Distance | |
|---|---|---|---|
| | | Provided | Required |
| Ardath Drive - West | 190' to Ardath Drive/Londonderry Lane | 225' | 200' (a) |
| Ardath Drive - East | 80' to Ardath Drive/Green Street | 300' | 200' (a) |
| Green Street - North | 70' to Ardath Drive/Green Street | 84' | 100' (b) |
| Green Street - South | 70' to Ardath Drive/Green Street | 270' | 150' (c) |

Note: (a) Sight distance requirement based on 30 mph speed.
(b) Sight distance requirement based on 15 mph for right-turning vehicles.
(c) Sight distance requirement based on 25 mph speed.

Adequate sight distance eastbound and westbound is provided at the Ardath Drive driveway location as shown in Table 2. However due to topography and roadway geometrics, inadequate sight distance is provided at the Green Street driveway location. In lieu of relocating the Green Street driveway location, it is recommended that the driveway be restricted to inbound only. To ensure that adequate sight distance be provided, fences, walls, screens, etc., should not be placed within the sight triangle for the driveway on Ardath Drive.

## PARKING ANALYSIS

The project site plan indicates that 19 on-site parking spaces are provided. ATE completed the following parking analysis to determine if the proposed parking satisfied the County of San Luis Obispo Municipal Code parking requirement. The Municipal Code parking ratio for the senior living facility is summarized below:

Nursing and Personal Care: 1 parking space/4 beds

**Table 3**
**San Luis Obispo County Municipal Code Parking Requirements**

| Land Use | Size | County Parking Ratio | Parking Requirement | Parking Provided |
|---|---|---|---|---|
| Senior Living Facility | 41 Beds | 1 Space/4 Beds | 10 Spaces | 19 Spaces |

Based on the Municipal Code presented in Table 3, the parking requirement for the project is 10 parking spaces. The 19 on-site parking spaces would satisfy the Municipal Code parking requirement.

Peak parking demand estimates were developed for the Kingston Bay Senior Living Project based on empirical parking rates presented in the Parking Generation, 4th Edition, Institute of Transportation Engineers (ITE). Table 4 shows that the parking demand estimates for the project based on the Assisted Living (Land Use Code #254) rates.

**Table 4**
**ITE Peak Parking Demand Requirements**

| Land Use | Size | Parking Demand Rate | Parking Demand | Parking Provided |
|---|---|---|---|---|
| Senior Living Facility | 31 Units | 0.41 Space/Dwelling Unit[a] | 13 Spaces | 19 Spaces |
| Senior Living Facility | 31 Units | 0.54 Space/Dwelling Unit[b] | 17 Spaces | |

Note: (a) Parking demand rate is the average rate.
(b) Parking demand rate is the 85th percentile rate.

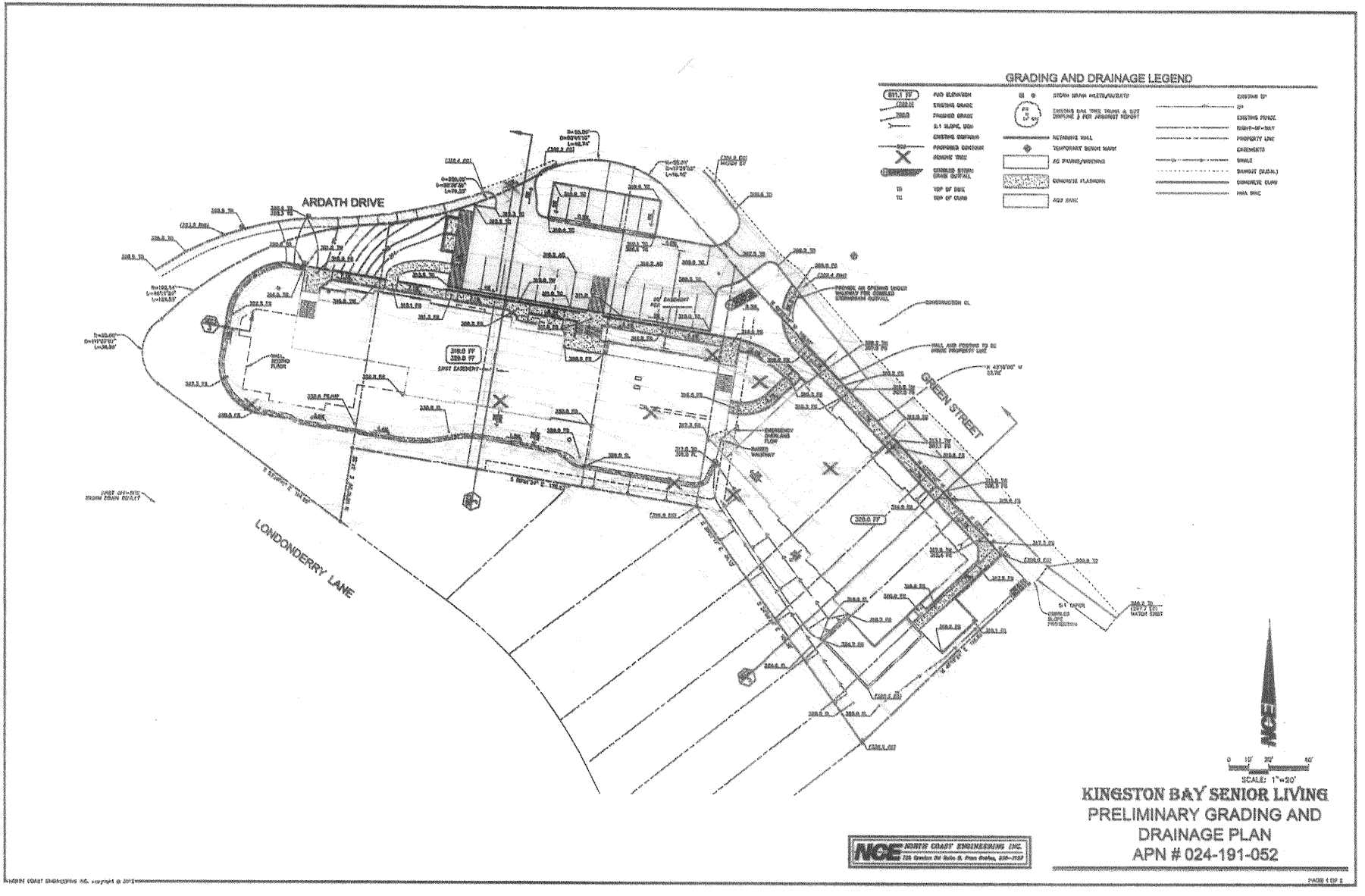
As shown in Table 4, the average peak parking demand estimate for the project is 13 parking spaces, while 17 parking spaces are required to meet the 85thpercentile peak parking demand. The 19 on-site parking spaces would satisfy the estimated peak parking demand in either case.

This concludes our traffic and parking assessment for the Kingston Bay Senior Living Project.

Associated Transportation Engineers

Scott A. Schell, AICP, PTP
Vice President

SAS/DFN/wp
attachments: Figure 1- Project Site Plan
Figure 2 - Project Trip Distribution and Assignment
Drawing A-5a San Luis Obispo County Intersection & Driveway Sight Distance

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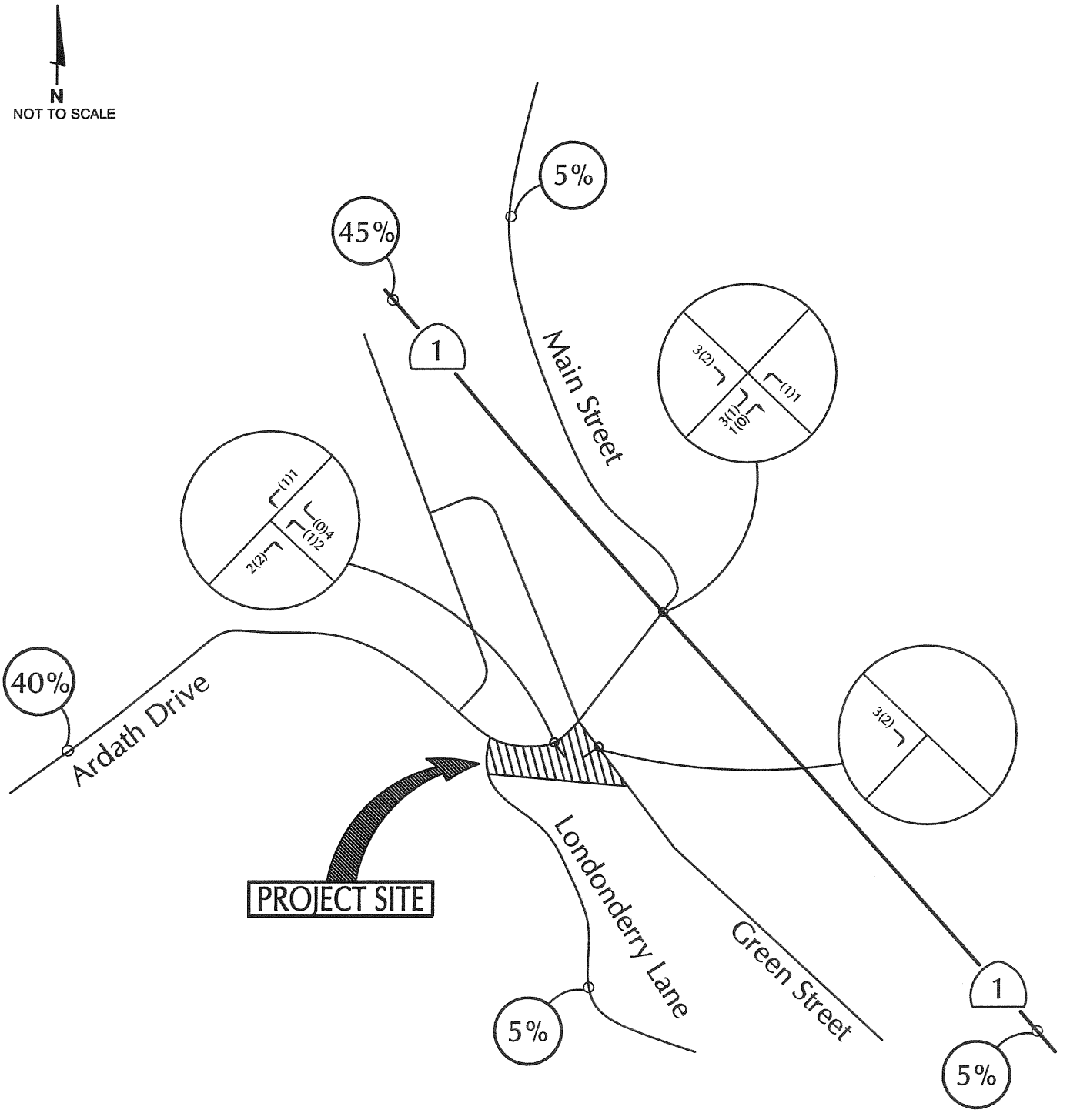
PROJECT SITE PLAN

FIGURE 1

MMF - #12092




LEGEND

% - Distribution Pecentage

XX - (A.M.)P.M. Peak Hour Volume

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PROJECT TRIP DISTRIBUTION AND ASSIGNEMNT

FIGURE 2



MMF - #12092

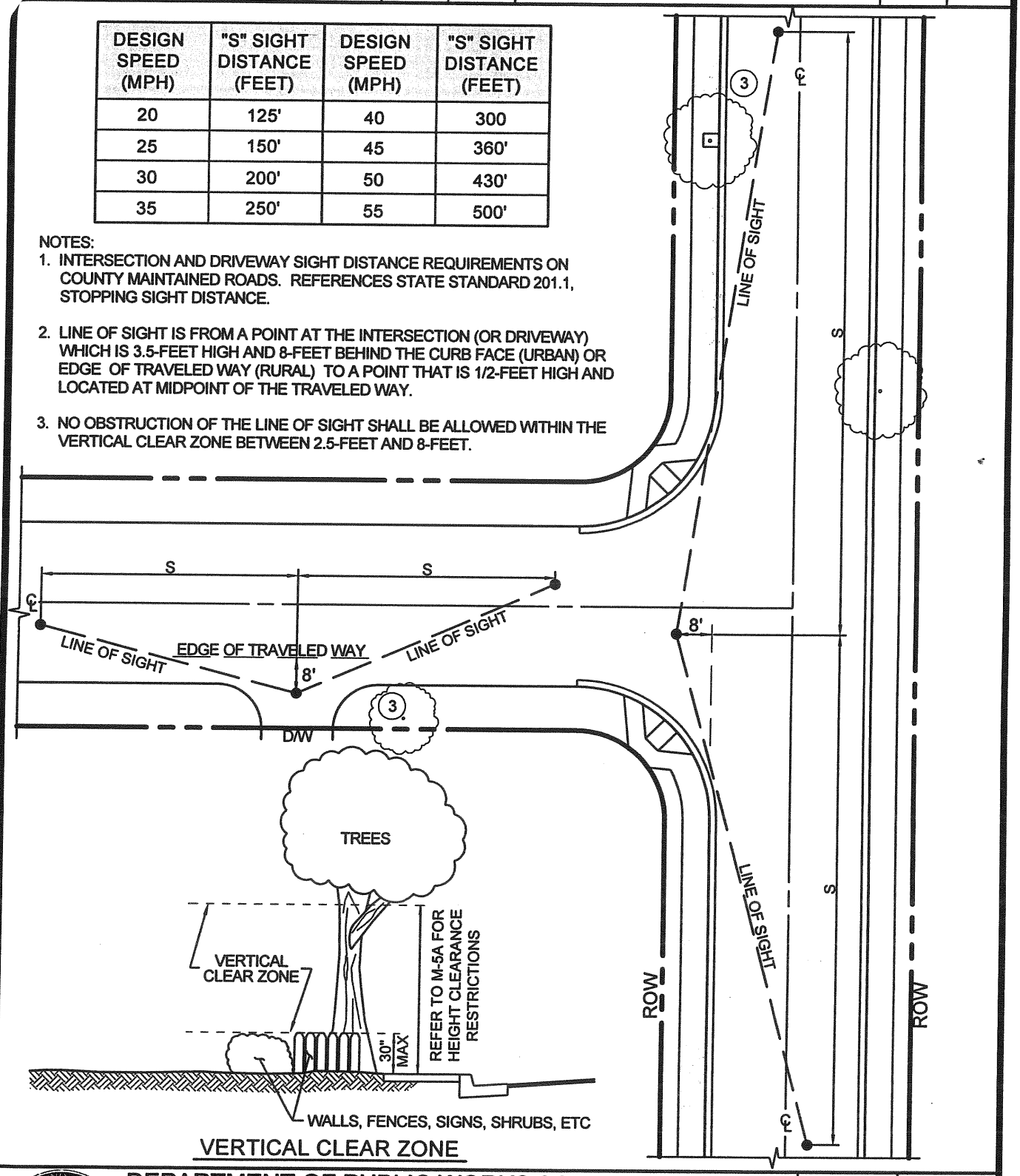
Revisions

| ...on | Approved | Date | Description | Approved | Date |
|---|---|---|---|---|---|
| ...AT DISTANCE LINES | REM | NOV 07 | D/W SIGHT DIST. SAME AS INTERSECTION | GDM | JAN 11 |
| ...IGHT DISTANCE CHANGED TO CALTRANS STD | GDM | NOV 08 | | | |

| DESIGN SPEED (MPH) | "S" SIGHT DISTANCE (FEET) | DESIGN SPEED (MPH) | "S" SIGHT DISTANCE (FEET) |
|---|---|---|---|
| 20 | 125' | 40 | 300 |
| 25 | 150' | 45 | 360' |
| 30 | 200' | 50 | 430' |
| 35 | 250' | 55 | 500' |

NOTES:

1. INTERSECTION AND DRIVEWAY SIGHT DISTANCE REQUIREMENTS ON COUNTY MAINTAINED ROADS. REFERENCES STATE STANDARD 201.1, STOPPING SIGHT DISTANCE.
2. LINE OF SIGHT IS FROM A POINT AT THE INTERSECTION (OR DRIVEWAY) WHICH IS 3.5-FEET HIGH AND 8-FEET BEHIND THE CURB FACE (URBAN) OR EDGE OF TRAVELED WAY (RURAL) TO A POINT THAT IS 1/2-FEET HIGH AND LOCATED AT MIDPOINT OF THE TRAVELED WAY.
3. NO OBSTRUCTION OF THE LINE OF SIGHT SHALL BE ALLOWED WITHIN THE VERTICAL CLEAR ZONE BETWEEN 2.5-FEET AND 8-FEET.




DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION

# INTERSECTION & DRIVEWAY SIGHT DISTANCE

| Scale: | Adopted: |
|---|---|
| 1"=30' | 2011 |

Drawing No: A-5a

Sheet No: 1 OF 1